

## **REMARKS**

### **Pending Claims**

Claims 15-28 have been canceled without prejudice or disclaimer. New claims 29-48 have been added. Claims 1-14 were canceled by prior amendment. Accordingly, claims 29-48 are now pending in this application.

### **Priority**

Applicants appreciate the Examiner's acknowledgment of the claim for priority and safe receipt of the priority document in the parent case.

### **35 U.S.C. §101**

Claims 15-28 were rejected under 35 USC 101 because the invention was alleged to be directed to non-statutory subject matter. In response, claims 15-28 have been canceled and new claims 29-48 submitted. New claims 29-48 achieve a useful, tangible and concrete result for accomplishing a practical application by generating a replica database. In particular, independent claims 29, 33 and 41 include "a replica database generated from said plurality of master databases". This limitation finds support at, e.g., page 3, lines 4-8. Applicant respectfully submits that generating a replica database is a useful, tangible and concrete result having a practical real-world application and value.

**35 U.S.C. §§102 and 103**

Claims 15-18 stand rejected under 35 U.S.C. §102(b) as being anticipated by Kashyap et al., U.S. Patent No. 5,873,074 (hereafter "Kashyap"). Claims 19-28 stand rejected under 35 U.S.C. §102(b) as being anticipated by Sheffield et al., U.S. Patent No. 5,937,415 (hereafter "Sheffield"). Applicant respectfully traverses these rejections, and requests reconsideration and withdrawal of the rejections for the following reasons.

According to Applicant's invention, when an accepted data operation request satisfies a timing condition, the records stored in one master database and subjected to the data operation are joined with another of the plurality of master databases based on a stored joining key corresponding to the timing condition to generate a new record in the replica database. As a result, a replica database can be generated from a plurality of master databases by storing joining keys, master database names, replica database names and timing conditions (see, for example, replication control table 119 in Figs. 4 and 5). When timing conditions are met, joining processing is performed for the plurality of master databases to generate the replica database by acquiring master database names of the master database on which the data operation has been operated, a stored joining key, a second master database name to be joined by the joining key and the replica database name (see page 13, line 14, through page 14, line 19; and Figs. 1, 5 and 6, for example). A replica database

record generated by the joining process is reflected in the replica database (see, for example, Figs. 1, 5 and 6).

Kashyap teaches a means 28 for hash-joining a build table 20 with a probe table 22 for performing a join operation (see, e.g., col. 1, lines 37-44; col. 5, lines 55-59; and FIG. 2). Kashyap provides no teaching of determining whether a processing result of the data operation request meets timing conditions, as required by Applicant's independent claims. Further, Kashyap provides no teaching of, when the timing conditions are met, acquiring the master database name of the first master database on which said data operation request has been operated, one of said stored joining keys corresponding to said timing conditions, and a second master database name of a second master database and the replica database name to be joined by the joining key from the replication control information, as also recited in Applicant's independent claims. Under Applicant's invention, when an individual relevant record meets predetermined timing conditions, the record is subject to joining based on a joining key. Kashyap, on the other hand, joins two tables without regard to any timing conditions. Accordingly, Applicant's claims 29, 33 and 41 are allowable over Kashyap.

Sheffield also fails to teach the features of the invention discussed above with respect to Kashyap. Sheffield is directed to moving data from one database management system to another, such as from a source data source to a destination data source (see, e.g., col. 23, line 57, through col. 24, line 2). Sheffield uses data

pipelines which make it possible to copy rows from one or more source tables to a new or existing destination table, either within a database, or across databases or DBMSs. However, Sheffield fails to teach or suggest determining whether a processing result of a data operation request meets timing conditions, as required by Applicant's independent claims. Further, Sheffield provides no teaching of, when the timing conditions are met, acquiring the master database name of the first master database on which said data operation request has been operated, one of said stored joining keys corresponding to said timing conditions, and a second master database name of a second master database and the replica database name to be joined by the joining key from the replication control information, as also recited in Applicant's independent claims. Accordingly, independent claims 29, 33 and 41 are allowable over Sheffield, Kashyap, and the other art of record, whether taken singly, or in combination. The remaining claims depend from these claims and are allowable at least because they depend from an allowable base claim.

Appl. No. 10/785,990  
Amendment dated March 27, 2007  
Reply to Office Action of October 27, 2006

ASA-989-03

**Conclusion**

In view of the foregoing, Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Colin D. Barnitz', with a stylized flourish at the end.

Colin D. Barnitz  
Registration No. 35,061

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.  
1800 Diagonal Rd., Suite 370  
Alexandria, Virginia 22314  
(703) 684-1120  
Date: March 27, 2007